UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,422	08/01/2001	Timothy Dennis Born	2-1	5900

7590	06/07/2004	**EXAMINER**

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ART UNIT	PAPER NUMBER
2124	

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _01 August 2001_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-8_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-8_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _31 August 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. Claims 1-8 have been examined.

Specification

2.   The disclosure is objected to because of the following informalities: the section titled as

"Problem" on page 1 of the specification should be titled as "Description of Related Art".

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
     DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
     COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program
     listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables
     having more than 50 pages of text are permitted to be submitted on compact
     discs.) or
     REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).
     "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
     (1) Field of the Invention.
     (2) Description of Related Art including information disclosed under 37 CFR 1.97
     and 1.98.
(f) BRIEF SUMMARY OF THE INVENTION.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(h) DETAILED DESCRIPTION OF THE INVENTION.
(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3.   The disclosure is objected to because of the following informalities: "Applicants have inventively combined" on page 5, line 4 of the specification should be "The present invention combines".

     Appropriate correction is required.

4.   The disclosure is objected to because of the following informalities: the specification is replete with the term "Applicants". The term should be replaced with a generic term, such as "the present invention". For example, "Applicants' invention" on page 5, lines 12-13 of the specification should be replaced with "present invention".

     Appropriate correction is required.

Claim Objections

5.   Claim 3 is objected to because of the following informalities: "ASN Data Depository" on lines 1-2 and line 6 of the claim should be "ASN Data Repository". Appropriate correction is required.

6.   Claim 4 is objected to because of the following informalities: "ASN Data Depository" on line 5 and lines 8-9 of the claim should be "ASN Data Repository". Appropriate correction is required.

7.   Claim 4 is objected to because of the following informalities: "analying" in line 6 of the claim should be "analyzing". Appropriate correction is required.

8.   Claim 5 is objected to because of the following informalities: "(Abstract System Notation)" in line 2 of the claim should be "(Abstract Syntax Notation)". Appropriate correction is required.

9.   Claim 5 is objected to because of the following informalities: there is an extra period on line 3 of the claim. Please delete the extra period. Appropriate correction is required.

10.   Claim 7 is objected to because of the following informalities: "ASN Data Depository" on lines 2-3 and line 7 of the claim should be "ASN Data Repository". Appropriate correction is required.

11.   Claim 8 is objected to because of the following informalities: "ASN Data Depository" on line 6 and lines 9-10 of the claim should be "ASN Data Repository". Appropriate correction is required.

12.   Claim 8 is objected to because of the following informalities: "analying" in line 7 of the

claim should be "analyzing". Appropriate correction is required.

Claim Rejections - 35 USC § 112

13.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

14.   Claims 3 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

15.   Claim 3 recites the limitation "the step of compiling said ASN Data Depository" on lines

1-2 of the claim. There is insufficient antecedent basis for this limitation in the claim. This

limitation is interpreted as "the step of compiling said ASN input file".

16.   Claim 7 recites the limitation "the steps of compiling said ASN Data Depository" on lines

2-3 of the claim. There is insufficient antecedent basis for this limitation in the claim. This

limitation is interpreted as "the steps of compiling said ASN input file".

Claim Rejections - 35 USC § 103

17.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

> such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18.   Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bapat (U.S.

5,291,583) in view of Laitinen (U.S. 5,862,383).

Per Claim 1:

Bapat teaches a method of generating compiled code for producing messages in

conformance with an ASN (Abstract Syntax Notation) Standard ("In one aspect of the present

invention, a translator for translating objects defined in Abstract Syntax Notation such as ASN.1

to a relational database schema permits persistent storage of object instances as records in a

relational database." in column 2, lines 60-64), comprising the steps of: using a syntax analysis

process, compiling an ASN input file describing the rules of said ASN Standard into an ASN

Data Repository comprising a data structure of said ASN input file; using a general script file,

comprising program statements of rules for creating any information required about entries in

said ASN Data Repository, to interpret contents of said ASN Data Repository to create an output

file ("Turning now to FIG. 5, a flow chart of the overall operation of the present invention is

shown beginning at step 100. At step 102, translator reads the managed object class definitions,

and constructs a managed object class hierarchy (M.O.C.H.). Control then passes to step 104,

where the relational schema and indexes are generated. Finally, the managed object dictionary is

generated at step 106 and the process terminates at 110. This gross process is broken down into

more detailed routines to be discussed hereafter." in column 27, lines 23-33; column 31, lines 67-

68 to column 32, lines 1-17; and see Figures 5, 6, 7 and 19). Bapat does not explicitly teach

using an Application Programmer input file describing requirements for messages for a particular

application, and said output file as inputs to a CASE tool to generate outputs for use by a

Compiler for a particular processor.

Laitinen teaches using an Application Programmer input file describing requirements for

messages for a particular application, and said output file as inputs to a CASE tool to generate

outputs for use by a Compiler for a particular processor ("As shown in FIG. 1, the visual editor

24 is employed to enter the appropriate constraints into the TSN language, indicated at block 32.

... Instructions for the encoding and the decoding functions, as provided by the host language in

the fourth processing section 68 of the computer system 26, are outputted by the fourth

processing section 68 via line 106 to the static memory section 96B of the program memory 96

of the control unit 92. The memory 96 stores a program for operation of the computer 94. In the

event that the control unit 92 has its own operating system 98 installed within the control unit 92,

then the host language, such as C++ can be inputted directly into the control unit 92. Thereupon,

the operating system converts the instructions of the host language into machine language for

operating the computer 94. In the event that the control unit 92 does not have an operating

system installed therein, then the host language must be processed further by the computer

system 26 to produce the machine language for instructing the computer 94 in accordance with

the encoding and decoding functions, as set forth in the imperative form of the TSN language

outputted by the second processing section 38 of the computer system 26. In the control unit 92,

the dynamic memory section 96A stores the present state of the operation of the various units of

the telephone 70, while the static memory section 96B stores the encoding and decoding

functions for control of the data, and the state machine code." in column 4, lines 19-28; and

column 6, lines 1-24).

It would have been obvious to one having ordinary skill in the computer art at the time of

the invention was made to modify the method disclosed by Bapat to include using an Application

Programmer input file describing requirements for messages for a particular application, and said

output file as inputs to a CASE tool to generate outputs for use by a Compiler for a particular

processor using the teaching of Laitinen. The modification would be obvious because one of

ordinary skill in the art would be motivated to provide messages that are in conformance with the

ASN standard for different processors.

Per Claim 2:

The rejection of claim 1 is incorporated, and Laitinen further teaches compiling code for

said particular processor using said output of said CASE tool in said Compiler for said particular

processor (column 6, lines 1-24).

Per Claim 3 (as best understood):

The rejection of claim 1 is incorporated, and Bapat further teaches wherein the step of

compiling said ASN input file, comprises the steps of: generating said ASN input file through a

lexical analysis of ASN source statements to generate a file of ASN lexemes; and using a syntax

analyzer to compile said ASN lexemes into said ASN Data Repository (column 12, lines 55-68).

Per Claim 4:

The rejection of claim 1 is incorporated, and Bapat further teaches wherein the step of

creating said output file comprises the steps of: generating a file of general script lexemes using a

lexical analysis of a general script source containing the rules for creating information in said

ASN Data Repository; and using a syntax analyzer, analyzing said general script lexemes to

create a file of general script precompiled functions; and using a general script Executor to act

upon entries in said ASN Data Repository with said general script precompiled functions to

produce said output file (column 12, lines 55-68; and column 31, lines 67-68 to column 32, lines

1-17).

Per Claims 5-6, 7 (as best understood) & 8:

These are apparatus versions of the claimed method discussed above (claims 1-4,

respectively), wherein all claim limitations also have been addressed and/or covered in cited

areas as set forth above. Thus, accordingly, these claims are also obvious.

Conclusion

19.   Any inquiry concerning this communication from the examiner should be directed to

Qamrun Nahar whose telephone number is (703) 305-7699. The examiner can normally be

reached on Mondays through Thursdays from 9:00 AM to 6:30 PM. The examiner can also be

reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone number for the

organization where this application or processing is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QN
May 21, 2004

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